

No. 6
in a Six-part
Series



Making **SENSE** of

MERCURY

fact sheet

CFLs save energy but require special care

You see them everywhere ... in businesses, schools, offices and homes. Fluorescent lighting is a common fixture thanks in part to its energy efficiency and long-term cost savings.

Most of us are familiar with fluorescent light bulbs – not only the common 4-foot and 8-foot “tubes,” but also the newer compact fluorescent light bulbs (CFLs). In fact, many consumers have switched to using CFLs in recent years. Most of us know that fluorescent bulbs are energy efficient – using about one-fourth the energy and lasting about 10 times longer than incandescent bulbs (traditional light bulbs). That efficiency saves energy and money.

Many of us, however, are unaware that fluorescent bulbs as well as other types of energy-efficient lighting contain mercury – which is toxic. These bulbs are safe to use and do not release mercury while intact. When broken, compacted, crushed or disposed of improperly, however, fluorescent bulbs may release mercury into the air, water and soil posing a significant risk to human health and the environment.

Manufacturers have taken significant steps to reduce the mercury content of fluorescent light bulbs. For

example, many brands of CFLs contain less than 5 milligrams (mg) of mercury (compared to older household thermometers that contain about 500 mg of mercury). In addition, manufacturers of some fluorescent tubes have introduced “green” tip bulbs. While they typically contain less mercury than standard fluorescent tubes, they still contain mercury. With this being the case, all fluorescent light bulbs should be recycled.

Recycling Fluorescent Bulbs

Consumers should take advantage of recycling options for fluorescent light bulbs where available. Residents in some communities can recycle them through their local recycling programs. Other local programs may hold single-day collection events.

For more information, contact your local recycling coordinator or solid waste director. To identify your local recycling program contact, visit www.scdhec.gov/environment/lwm/recycle/counties.htm or call the S.C. Department of Health and Environmental Control's (DHEC) Office of Solid Waste Reduction and Recycling (Office) at **1-800-768-7348**. In

The Home Depot offers CFL recycling program.

The Home Depot, the world's largest home improvement retailer, announced in June 2008 that it would offer a CFL recycling program at all 1,973 The Home Depot locations in the United States. This FREE service is the first such offering made so widely available by a retailer in the United States and offers customers additional options for making environmentally conscious decisions from purchase to end-of-life management.

At each The Home Depot store, customers can simply bring in any expired, unbroken CFL and give it to the store associate at the returns desk. The bulbs will then be recycled by an environmental management company. To find a store near you, visit www.homedepot.com.

addition, there are several companies in South Carolina that recycle fluorescent bulbs. For more information on these companies, visit www.scdhec.gov/environment/admin/CWM/wmindex/WmindexSearch.aspx.

Businesses are different. They may, in fact, be required by law to recycle their fluorescent bulbs or treat them as hazardous waste. Businesses must follow all state and federal regulations regarding the proper management of fluorescent bulbs. Call DHEC's Division of Compliance and Enforcement at (803) 896-4136 for information on applicable hazardous waste regulations.

For More Information ...

For more information on CFLs, the S.C. Energy Office has prepared a fact sheet that can be found at www.energy.sc.gov/publications/CFLs.pdf.

The Office has prepared two fact sheets to assist businesses in the proper management of fluorescent bulbs. The Technical Assistance Fact Sheet "Proper Management of Universal Waste Lamps" can be found at www.scdhec.gov/recycle/html/pubs.html while the Best Management Practices "Fluorescent Bulb Recycling" Sheet can be found at www.scdhec.gov/environment/lwm/recycle/pubs/sb_fluorescent.pdf.

Making Sense of Mercury

For other fact sheets in this series, visit www.scdhec.gov/mercury.

Steps for Cleaning Up Broken Fluorescent Light Bulbs

The U.S. Environmental Protection Agency recommends the following clean-up and disposal guidelines. Visit www.epa.gov/mercury/spills/index.htm for more information including clean-up steps for clothing, bedding and other soft materials

BEFORE CLEANING-UP

1. Have people and pets leave the room and don't let anyone walk through the breakage area.
2. Open a window and leave the room for 15 minutes or more.
3. Shut off the central heating/air conditioning system.

NOTE: Clean-steps 4 through 7 are different for hard surfaces and carpets.

CLEAN-UP STEPS FOR HARD SURFACES

4. Carefully scoop glass fragments and powder using stiff paper or cardboard and place them in a glass jar with metal lid (e.g., canning jar) or in a sealed plastic bag.
5. Use tape (e.g., duct tape) to pick up any remaining small glass fragments and powder.
6. Wipe the area clean with damp paper towels or disposable wet wipes and place them in the glass jar or plastic bag.
7. Do not use a vacuum or broom to clean up the broken bulb on hard surfaces.

CLEAN-UP STEPS FOR CARPETS OR RUGS

4. Carefully pick up glass fragments and place them in a glass jar with metal lid (such as a canning jar) or in a sealed plastic bag.
5. Use tape (e.g., duct tape) to pick up any remaining small glass fragments and powder.
6. If vacuuming is needed after all visible materials are removed, vacuum that area.
7. Remove the vacuum bag (or empty and wipe the canister), and put the bag or vacuum debris in a sealed plastic bag.

DISPOSAL OF CLEAN-UP MATERIALS

8. Immediately place all clean-up materials outside the building in a trash container or outdoor protected area for the next normal trash pick up.
9. Wash your hands after disposing of the jars or plastic bags containing clean-up materials.

FUTURE CLEANING OF CARPETS OR RUGS

10. The next several times you vacuum, shut off the central heating/air conditioning system and open a window prior to vacuuming.
11. Keep the central heating/air conditioning system shut off and the window open for at least 15 minutes after vacuuming is completed.

For more information, visit www.scdhec.gov/mercury or call the S.C. Department of Health and Environmental Control's Office of Environmental Community Health at 1-888-849-7241. Information for this fact sheet was provided courtesy of the **U.S. Environmental Protection Agency** and the **Agency for Toxic Substances and Disease Registry**.

